

**Case 3344*****Pseudorthocladius* Goetghebuer, 1943 and *Mesosmittia* Brundin, 1956 (Insecta, Diptera, CHIRONOMIDAE): proposed conservation of the generic names**

Martin Spies

*clo Zoologische Staatssammlung München, Münchhausenstr. 21, D-81247 München, Germany (e-mail: spies@zi.biologie.uni-muenchen.de)*

**Abstract.** The purpose of this application, under Articles 23.4 and 23.9.3 of the Code, is to conserve the generic names *Pseudorthocladius* Goetghebuer, 1943 and *Mesosmittia* Brundin, 1956 for two widespread genera of non-biting midges by the suppression of *Pseudorthocladius* Edwards, 1932. *Pseudorthocladius* Edwards, 1932 is a senior homonym of *Pseudorthocladius* Goetghebuer, 1943, but has not been used for the last 50 years, being replaced with *Mesosmittia* Brundin, 1956. It is proposed that the replacement of *Pseudorthocladius* Edwards, 1932 with *Mesosmittia* Brundin, 1956 is accepted.

**Keywords.** Nomenclature; taxonomy; CHIRONOMIDAE; *Pseudorthocladius*; *Mesosmittia*; *Pseudorthocladius curtistylus*; *Mesosmittia flexuella*; non-biting midges.

---

1. Goetghebuer (1932, p. 93) proposed *Pseudorthocladius* as the name of a new subgenus in the genus *Orthocladius* van der Wulp, 1874, to include three nominal species of non-biting midges (family CHIRONOMIDAE): *Spaniotoma* (*Orthocladius*) *flexuella* Edwards, 1929 (p. 349); *Psectrocladius curtistylus* Goetghebuer, 1921 (p. 101); and *Psectrocladius filiformis* Kieffer, 1908. No type species was fixed for *Pseudorthocladius* Goetghebuer, 1932, which is therefore a nomen nudum (Article 13.3).

2. Edwards (1932a, p. 141), in a literature review of Goetghebuer's (1932) work, published the statement: 'Four new subgeneric names are introduced by Dr. Goetghebuer, but for three of these type-species are not indicated; I hereby designate the following: . . . *Pseudorthocladius*, "*S. flexuella* Edw. . . .' (names of other taxa omitted for clarity). Edwards (1932a) included no other species in *Pseudorthocladius*; the two additional species placed there by Goetghebuer (1932) he assigned to a different taxon. In this classification, largely carried over from Edwards (1929), *Pseudorthocladius* was not given subgeneric rank as in Goetghebuer (1932), but corresponded to *Spaniotoma* (*Orthocladius*) 'Group E' sensu Edwards (1929, p. 349). Likewise, *Psectrocladius curtistylus* Goetghebuer (see para. 3) – misrepresented as '*Dactylocladius curtistylus* Goet.' – was placed in 'Group F' of *Spaniotoma* (*Orthocladius*), 'which might bear the name *Spaniotoma*' (Edwards, 1932a, p. 141). This system ignored the Principle of Coordination (Edwards, 1929, p. 308, footnote): the previously unused name *Spaniotoma* Philippi, 1865 was reintroduced for a genus including *Orthocladius* as a subgenus, but there was no nominotypical subgenus *Spaniotoma* (*Spaniotoma*), and the subfamily was called 'Orthocladiinae'.

Moreover, several previously available genus-group names were not necessarily used as valid in the sense of the Code, but were presented in more or less tentative association (see the above quote from Edwards, 1932a, concerning 'Group F') with Edwards' own lettered group terms; for example, '(*Dactylocladius*, Kieff.)' was set in a separate line underneath the text section title 'Group D' in *Spaniotoma* (*Orthocladius*) (Edwards, 1929, p. 346). Edwards (1932b), published about one month after Edwards (1932a), repeated this classification: the 'type of the new subgenus *Pseudorthocladius* Goetghebuer' was treated under the name '*Spaniotoma* (*Orthocladius*) *flexuella* Edw.', and placed in 'a special section of *Orthocladius* for this species alone'.

3. Goetghebuer (1943 in 1940–1950, p. 73; for publication dates of the successive instalments of this work see Evenhuis, 1997, p. 461) treated the name and systematic placement of *Pseudorthocladius* after Goetghebuer (1932), but this time gave *Psectrocladius curtistylus* Goetghebuer as the 'genotype', and transferred *Spaniotoma flexuella* Edwards to the genus *Limmophyes* Eaton, 1875 (op. cit., 1944, p. 134). In doing so, Goetghebuer apparently was unaware of Edwards' (1932a, 1932b) publications; there is no reference to them in Goetghebuer (1940–1950), and a note given under *L. flexuellus* (op. cit., 1944, p. 134) clearly refers to the treatment of the species in Edwards (1929) rather than in Edwards (1932a, 1932b). Under these circumstances, Goetghebuer's (1943 in 1940–1950) treatment of *Pseudorthocladius* may be seen as the effective (though unintentional) establishment of a separate available name.

4. Until 1951, most authors publishing on the taxa in question made no reference whatsoever to Edwards' (1932a, 1932b) works, and derived their nomenclature and taxonomic concepts from those of Goetghebuer (1932 or 1940–1950, respectively) (see, e.g. Thienemann & Krüger, 1939; Thienemann, 1944; Brundin, 1949; Hennig, 1950; Strenzke, 1950). On the other hand, Coe (1945, 1950) followed Edwards, and Laurence (1951) argued that *Pseudorthocladius* Edwards took precedence over *Pseudorthocladius* Goetghebuer by virtue of the type designation in Edwards (1932a). He proposed '*Pseudokiefferiella* sub-genus nov.' for *Pseudorthocladius* Goetghebuer, but that substitute name was preoccupied by *Pseudokiefferiella* Zavřel, 1941 (see Spies & Sæther, 2004, pp. 19–20). Freeman (1953) and Thienemann (1954), although aware of Laurence's (1951) arguments, chose to maintain and use *Pseudorthocladius* Goetghebuer.

5. Brundin (1956, pp. 138–139) reviewed the conflicting uses of *Pseudorthocladius* and related names, but the solution he proposed was guided more by taxonomic considerations than by rules of nomenclature. In following most of Goetghebuer's (1940–1950) rather than Edwards' (1929, 1932a) classification – especially concerning Edwards' peculiar treatment of *Spaniotoma* – Brundin (1956, pp. 137–139) used *Pseudorthocladius* Goetghebuer, 1943 instead of *Pseudorthocladius* Edwards, 1932 and replaced the latter by a new name, *Mesosmittia* Brundin, 1956 (p. 163), with the same type species as in Edwards (1932a, 1932b).

6. Since Brundin (1956), his basic definitions of the two genera in question and the names he applied to the latter have been used unanimously: in all applicable catalogues of Chironomidae taxa (e.g. Freeman & Cranston, 1980; Ashe, 1983; Ashe & Cranston, 1990; Oliver, Dillon & Cranston, 1990; Spies & Reiss, 1996), standard keys (e.g. Wiederholm, 1983, 1986, 1989; Langton, 1991; Sæther et al., 2000),

pertinent revisions (Sæther & Sublette, 1983; Sæther, 1986; Andersen & Mendes, 2002), etc. The genus treated under the name '*Pseudorthocladius* Goetghebuer' presently includes about 35 nominal species, and has been reported from all zoogeographic world regions except Australia and the Antarctic (e.g. Sæther & Andersen, 1996; Chaudhuri et al., 2001; Roque et al., 2003). Members of '*Mesosmittia* Brundin' are known from the Holarctic, Afrotropical and Neotropical regions; currently there are 14 named species (Andersen & Mendes, 2002). Some authors have credited *Pseudorthocladius* to Goetghebuer (1932) rather than to Goetghebuer (1943) and some details of the synonymies and explanations given have varied, but the present applicant is unaware of any post-1956 publication that would constitute an exception to the universal use of *Pseudorthocladius* Goetghebuer and *Mesosmittia* Brundin, and disuse of *Pseudorthocladius* Edwards. Several authors have commented that this usage is not in accordance with the Code and that a ruling by the Commission is necessary (e.g. Cranston, 1975; Ashe, 1983; Sæther & Sublette, 1983; Andersen & Mendes, 2002). However, no corresponding application has previously been submitted.

7. To use *Pseudorthocladius* Edwards in place of *Mesosmittia*, and to establish a substitute name for *Pseudorthocladius* Goetghebuer, would represent the most destabilizing and confusing kind of nomenclatural change: the switching of a scientific name in widespread use for one taxonomic concept to a different concept for which another name has also been in common use. However, only one of the two conditions for Reversal of Precedence (Article 23.9) is met. *Pseudorthocladius* Goetghebuer, 1943 and *Mesosmittia* Brundin, 1956 are in prevailing usage for the last 50 years as presumed valid names (Article 23.9.1.2). However, the senior homonym *Pseudorthocladius* Edwards, 1932 was established after 1899 and hence does not qualify as a nomen oblitum (Article 23.9.1.1).

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Pseudorthocladius* Edwards, 1932 for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Pseudorthocladius* Goetghebuer, 1943 (gender: masculine), type species by original designation *Psectrocladius curtistylus* Goetghebuer, 1921;
  - (b) *Mesosmittia* Brundin, 1956 (gender: feminine), type species by original designation and monotypy *Spaniotoma (Orthocladius) flexuella* Edwards, 1929;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *curtistylus* Goetghebuer, 1921, as published in the binomen *Psectrocladius curtistylus* (specific name of the type species of *Pseudorthocladius* Goetghebuer, 1943);
  - (b) *flexuella* Edwards, 1929, as published in the binomen *Spaniotoma (Orthocladius) flexuella* (specific name of the type species of *Mesosmittia* Brundin, 1956);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Pseudorthocladius* Edwards, 1932, as suppressed in (1) above.



## References

- Andersen, T. & Mendes, H.F. 2002. Neotropical and Mexican *Mesosmittia* Brundin, with the description of four new species (Insecta, Diptera, Chironomidae). *Spixiana*, **25**: 141–155.
- Ashe, P. 1983. A catalogue of chironomid genera and subgenera of the world including synonyms (Diptera: Chironomidae). *Entomologica Scandinavica Supplement*, **17**: 1–68.
- Ashe, P. & Cranston, P.S. 1990. Family Chironomidae. Pp. 113–355 in Soós, A. & Papp, L. (Eds.), *Catalogue of Palaearctic Diptera*, vol. 2. 499 pp. Akadémiai Kiadó, Budapest.
- Brundin, L. 1949. Chironomiden und andere Bodentiere der südschwedischen Urgebirgsseen. Ein Beitrag zur Kenntnis der bodenfaunistischen Charakterzüge schwedischer oligotropher Seen. *Reports from the Institute of Freshwater Research, Drottningholm*, **30**: 1–914.
- Brundin, L. 1956. Zur Systematik der Orthocladiinae (Dipt., Chironomidae). *Reports from the Institute of Freshwater Research, Drottningholm*, **37**: 5–185.
- Chaudhuri, P.K., Hazra, N. & Alfred, J.R.B. 2001. A checklist of chironomid midges (Diptera: Chironomidae) of the Indian subcontinent. *Oriental Insects*, **35**: 335–372.
- Coe, R.L. 1945. Chironomidae. Pp. 334–340 in Kloet, G.S. & Hincks, W.D. (Eds.), *A check list of British insects*. 59, 483 pp. Kloet & Hincks, Stockport, U.K.
- Coe, R.L. 1950. Family Chironomidae. Pp. 121–206 in Coe, R.L., Freeman, P. & Mattingly, P.F. (Eds.), *Handbooks for the identification of British insects*, vol. 9, part 2. 216 pp. Royal Entomological Society of London, London.
- Cranston, P.S. 1975. Corrections and additions to the list of British Chironomidae (Diptera). *Entomologist's Monthly Magazine*, **110**: 87–95.
- Edwards, F.W. 1929. British non-biting midges (Diptera, Chironomidae). *Transactions of the Royal Entomological Society of London*, **77**: 279–430.
- Edwards, F.W. 1932a. Recent literature. Faune de France: 23. Diptères: Chironomidae, IV. Par M. Goetghebuer. Paris (Lechevalier), 1932. *The Entomologist*, **65**: 140–141.
- Edwards, F.W. 1932b. The female of *Spaniotoma (Orthocladius) flexuella* Edw. *The Entomologist*, **65**: 167.
- Evenhuis, N.L. 1997. *Litteratura taxonomica dipterorum (1758–1930)*, 2 vols. 10, 871 pp. Backhuys, Leiden.
- Freeman, P. 1953. Chironomidae (Diptera) from Western Cape province – 1. *Proceedings of the Royal Entomological Society of London*, **22**: 127–135.
- Freeman, P. & Cranston, P.S. 1980. Family Chironomidae. Pp. 175–202 in Crosskey, R.W. (Ed.), *Catalogue of the Diptera of the Afrotropical Region*. 1437 pp. British Museum (Natural History), London.
- Goetghebuer, M. 1921. Chironomides de Belgique et spécialement de la zone des Flandres. *Mémoires du Musée royal d'histoire naturelle de Belgique*, **8**(4): 1–211.
- Goetghebuer, M. 1932. Diptères (Nématocères), Chironomidae IV. Orthocladiinae, Corynoneurinae, Clunioninae, Diamesinae. *Faune de France*, **23**: 1–204.
- Goetghebuer, M. 1940–1950. Tendipedidae (Chironomidae). f) Subfamille Orthocladiinae. A. Die Imagines. In Lindner, E. (Ed.), *Die Fliegen der palaearktischen Region*, vol. 3, family 13g. 208 pp., 24 pls. E. Schweizerbart, Stuttgart.
- Hennig, W. 1950. *Die Larvenformen der Dipteren*, vol. 2. vii, 458 pp., 10 pls. Akademie-Verlag, Berlin.
- Langton, P.H. 1991. *A key to pupal exuviae of West Palaearctic Chironomidae*. 386 pp. P.H. Langton, Huntingdon, U.K.
- Laurence, B.R. 1951. On two neglected type designations in the genus *Hydrobaenus* Fries, 1830. *Entomologist's Monthly Magazine*, **86**: 164–165.
- Oliver, D.R., Dillon, M.E. & Cranston, P.S. 1990. *A catalog of Nearctic Chironomidae*. 89 pp. Agriculture Canada Research Branch, Publication 1857/B.
- Roque, F.O., Trivinho-Strixino, S., Yamada, M.V. & Penteado-Dias, A.M. 2003. A preliminary survey of Chironomidae (Insecta: Diptera) in a heterogeneous landscape of Jaraguá State Park, São Paulo, Brazil. *Biotemas*, **16**: 67–78.
- Sæther, O.A. 1986 ('1985'). The imagines of *Mesosmittia* Brundin, 1956, with the description of seven new species (Diptera, Chironomidae). *Spixiana Supplement*, **11**: 37–54.
- Sæther, O.A. & Andersen, T. 1996. First Afrotropical records of the genera *Doithrix* Sæther et Sublette and *Georthocladius* Strenzke (*Toyamayusurika* Sasa et Kawai, syn. nov.)

- (Diptera: Chironomidae), with new combinations in the *Pseudorthocladius* group. *Tijdschrift voor Entomologie*, **139**: 243–256.
- Sæther, O.A., Ashe, P. & Murray, D.A.** 2000. Family Chironomidae. Pp. 113–334 in Papp, L. & Darvas, B. (Eds.), *Contributions to a manual of Palaearctic Diptera (with special reference to the flies of economic importance)*, Appendix vol. 604 pp. Science Herald, Budapest.
- Sæther, O.A. & Sublette, J.E.** 1983. A review of the genera *Doithrix* n. gen., *Georthocladius* Strenzke, *Parachaetocladius* Walker, and *Pseudorthocladius* Goetghebuer (Diptera: Chironomidae, Orthocladiinae). *Entomologica Scandinavica Supplement*, **20**: 1–100.
- Spies, M. & Reiss, F.** 1996. Catalog and bibliography of Neotropical and Mexican Chironomidae (Insecta, Diptera). *Spixiana Supplement*, **22**: 61–119.
- Spies, M. & Sæther, O.A.** 2004. Notes and recommendations on taxonomy and nomenclature of Chironomidae (Diptera). *Zootaxa*, **752**: 1–90.
- Strenzke, K.** 1950. Systematik, Morphologie und Ökologie der terrestrischen Chironomiden. *Archiv für Hydrobiologie, Supplement-Band*, **18**: 207–414.
- Thienemann, A.** 1944. Bestimmungstabellen für die bis jetzt bekannten Larven und Puppen der Orthocladiinen (Diptera, Chironomidae). *Archiv für Hydrobiologie*, **39**: 551–664.
- Thienemann, A.** 1954. Chironomus. Leben, Verbreitung und wirtschaftliche Bedeutung der Chironomiden. *Die Binnengewässer*, **20**: 1–834.
- Thienemann, A. & Krüger, F.** 1939. Terrestrische Chironomiden. II. *Zoologischer Anzeiger*, **127**: 246–258.
- Wiederholm, T. (Ed.)** 1983. Chironomidae of the Holarctic region. Keys and diagnoses. Part 1. Larvae. *Entomologica Scandinavica Supplement*, **19**: 1–457.
- Wiederholm, T. (Ed.)** 1986. Chironomidae of the Holarctic region. Keys and diagnoses. Part 2. Pupae. *Entomologica Scandinavica Supplement*, **28**: 1–482.
- Wiederholm, T. (Ed.)** 1989. Chironomidae of the Holarctic region. Keys and diagnoses. Part 3. Adult males. *Entomologica Scandinavica Supplement*, **34**: 1–532.

Acknowledgement of receipt of this application was published in BZN 62: 58.

---

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).